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Reference and Singular Thought

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- 1. Reference and singular propositions: The Russellian legacy. According to a widespread view, originating from Russell and championed by Donnellan, Kripke, Kaplan, Evans and many other leading philosophers of language of the twentieth century, (genuine or direct) reference, illustrated in (1), contrasts with (mere) description, illustrated in (2).
 - (1) *That man* is dangerous
 - (2) The man who did this is dangerous

When there is (genuine or direct) reference to some object a, as in (1), the proposition that is expressed is about a, in the sense that its correctness depends upon whether or not a satisfies what is predicated of it in the proposition. The proposition is singular (with respect to a). In such a case, as Peacocke (1975) pointed out, there is a particular object such that the proposition is true if and only if that object satisfies certain conditions (e.g. being a dangerous man). In contrast, when an object is only given through a definite description 'the F', as in (2), there isn't reference in the full-blown sense of the term. The proposition expressed is about the description's satisfier (the man who did this), and that may be turn out to be a, but the proposition is not directly about a. Evaluated with respect to a circumstance or 'possible world' w in which some object $x \neq a$ is the satisfier, its true value will depend upon x's condition in w rather than upon a's. So it is not the case that there is a particular object such that (whatever the circumstance of evaluation) the proposition is true just in case that object satisfies certain conditions.¹

The foregoing amounts to saying that referring expressions are *rigid*, while descriptions are not (Kripke 1980). Or at least, descriptions are not 'rigid *de jure*', as referring expressions are. A description will only be rigid if, like mathematical descriptions, it has *the same satisfier in every possible world* (rigidity *de facto*). But the reference of a genuine referring expression is determined before the encounter with the circumstance of evaluation, so it cannot vary according to the circumstance of evaluation: it is circumstance-independent (Kaplan 1989).

Within a structured proposition framework, it is customary to phrase the reference/description contrast in terms of distinct types of propositional constituents. The constituent of the structured proposition which corresponds to a definite description is not an object but what early Russell referred to as a denoting concept (Russell 1903). The constituent of the proposition corresponding to a genuine referring expression is supposed to be (directly) an object, namely the object which has to be mentioned in specifying the truth-conditions of the proposition.

2. Modes of presentation and cognitive content: The Fregean legacy.— The idea that the semantic contribution of a referring expression — its content — is directly an object raises a

¹ As Donnellan (1966) emphasizes, definite descriptions can be *used* referentially, to talk about some object the speaker has in mind. On that use they work like genuine referring expressions. But this is a matter of pragmatics: definite descriptions are not intrinsically referential, in contrast to genuine referring expressions.

fundamental objection, due to Frege. If the content of a referring expression is its reference, then two coreferential expressions must carry the same content. Yet a rational subject can entertain contradictory attitudes towards two sentences that only differ by the substitution of one of two coreferential expressions for the other. Thus a rational subject may endorse 'Cicero was Roman' while rejecting 'Tully was Roman', i.e. they may believe the content of one sentence while disbelieving the content of the other. Or they may assent to 'That man is dangerous' (pointing to one man), and dissent from 'That man is dangerous' (said while pointing to what the speaker wrongly takes to be another man). How is that possible if the content of the two sentences is the same, i.e., if they express the same singular proposition? And how could it not be the same, on the assumption that the content of a referring expression is its reference? After all, the two sentences in each of the pairs ('Cicero was Roman'/'Tully was Roman', 'That man is dangerous'/'That man is dangerous') only differ by the substitution of one coreferential expression for another.

Faced with that objection, we do not have to give up the distinction between those expressions that are directly referential (and contribute an object to semantic content) and those that aren't. We only have to draw *another* distinction, between two aspects of content, or two perspectives on content (McGinn 1982).

Thus far we have characterized the content of an utterance — the proposition it expresses —in terms of its truth-conditions. Let us start with the following 'criterion of difference' for content:

(TC) If there are circumstances with respect to which a sentence S is true while another sentence S' is not, then S and S' differ in content.

If we strenghten this into a biconditional, we get a characterization of one type of content: truth-conditional content. Two sentences S and S' differ in truth-conditional content — express different propositions — just in case there are circumstances with respect to which S is true while S' is not. A referring expression and a definite descriptions make different types of contribution to content thus understood: a referring expression contributes an object, while a definite description contributes an identifying property, and this results in differences in possible-worlds truth-conditions. The proposition expressed by a sentence in which a referring expression occurs is said to be singular because its truth-condition is singular: there is an object, namely the referent of that expression, such that the sentence is true just in case that object satisfies certain conditions. When we individuate content by truth-conditions in this manner, we *have to say* that 'Cicero was Roman' and 'Tully was Roman' have the same content or express the same proposition: they ascribe the same property to the same object. That is what raises the Fregean objection.

What the objection actually shows is that content can and should also be individuated in epistemological or cognitive terms. Truth-conditions are not enough. Even if two sentences express the same proposition in the truth-conditional sense, they may still carry distinct contents, in virtue of a second 'criterion of difference':

(CC) If it is possible for a rational and linguistically competent subject to accept a sentence S as true while taking a different stance (e.g. rejection) towards another sentence S', then S and S' differ in content.

If we strenghten this into a biconditional, we get a characterization of another type of content: cognitive content. Two sentences S and S' differ in cognitive content — express different thoughts — just in case a rational and linguistically competent subject may adopt different epistemic attitudes towards them (e.g. accept S as true while rejecting S').

The difference between referring expressions and definite descriptions is a difference at the level of truth-conditional content: these two types of expression make different types of truth-conditional contribution – one contributes an object, the other an individual concept. Two genuine referring expressions that designate the same object make the same contribution to truth-conditional content (viz. the object itself); but that does not mean that they carry the same content simpliciter. For there is more to content simpliciter than truth-conditional content: there is also cognitive content.

In so-called 'Frege cases', such as the Cicero/Tully example, two sentences which express the same proposition in the truth-conditional sense nevertheless carry distinct cognitive contents.² Since the sentences only differ by the substitution of one coreferential expression for another, the difference in cognitive content has to be traced to these expressions themselves. According to Frege, referring expressions like 'Cicero' and 'Tully' refer to the same individual, but carry distinct 'senses': the individual is presented differently in the two cases – as Tully, or as Cicero. What makes it possible for a rational subject to take conflicting attitudes towards what is in effect the same content, truth-conditionally individuated, is the fact that the content in question is presented differently. The modes of presentation associated with the names 'Cicero' and 'Tully' therefore affect the utterance's cognitive content, while the names contribute their reference (the same individual in both cases) to truth-conditional content. In other words: The sentences 'Cicero was Roman' and 'Tully was Roman' express the same proposition in the truth-conditional sense, and that proposition is singular, as we have seen; but they express different *thoughts*. The thought expressed by an utterance involves more than the objects, properties etc. which are constituents of the singular proposition that captures its truth-conditional content. The thought involves, in addition, particular ways of thinking of these constituents. To clarify the nature of singular thought, one needs to clarify the nature of these modes of presentation.

3. *Modes of presentation as descriptions*. — So, what are modes of presentation? Whatever they are, they have to satisfy what Schiffer calls 'Frege's Constraint':

Necessarily, if *m* is a mode of presentation under which a minimally rational person *x* believes a thing *y* to be F, then it is not the case that *x* also believes *y* not to be F under *m*. In other words, if *x* believes *y* to be F and also believes *y* not to be F, then there are distinct modes of presentation *m* and *m'* such that *x* believes *y* to be F under *m* and disbelieves *y* to be F under *m'*. Let us call this *Frege's Constraint*; it is a constraint which any candidate must satisfy if it is to qualify as a mode of presentation. (Schiffer 1978: 180)

This very minimal characterization of modes of presentation leaves considerable latitude to the theorist, however.

Frege himself thought of modes of presentation as individual concepts, that is, as descriptions of the referent. When we think about an object, we think of it as 'the F', where F is some uniquely-identifying property of the referent. A linguistic expression is thus associated with a 'sense' which mediates between the expression and its reference. The sense is a set of conditions which an item in the world has to satisfy in order to count as the reference of the expression. Equivalently, the sense of an expression is a collection of things known about the reference — the reference being the entity which fits the body of knowledge in question. Competent language users know what the conditions are, even if they do not know which entity in the world fits those conditions.

² The expression 'Frege case' was introduced in the literature by Jerry Fodor (1994).

Appearances notwithstanding, thinking of modes of presentation as descriptions in this way is compatible with the idea that referring expressions contrast with definite descriptions by directly contributing an object, rather than an individual concept, to truth-conditional content. For there may still be a role for individual concepts on the direct-reference story: the object which is the contribution of a referring expression to truth-conditional content may itself be determined via satisfaction of an individual concept, even though it is the object rather than the individual concept that is the expression's contribution to truth-conditional content (Kaplan 1978). In other words, in the case of referring expressions and singular thought, the individual concept is confined to the level of cognitive content, and does not impinge upon truth-conditional content. It serves merely to 'fix the reference', as Kripke (1980) says.³ Individual concepts in general are, or can be modeled as, functions from situations to individuals. The individual concept contributed by a definite description is a function that applies to the circumstance of evaluation, returning an individual that depends upon the circumstance in question. In the case of referring expressions, however, the individual concept applies to the situation of utterance (the 'context'), not to the situation of evaluation (the 'circumstance'). It returns an individual which goes into the proposition and is, therefore, fixed before the encounter with the circumstance of evaluation (Kaplan 1989).

There are major objections to that descriptivist construal of modes of presentation, however. The most important one is the *buck-passing objection*. If the reference of an expression is determined by a set of conditions mentally represented by the linguistically competent subject, and constituting its sense, then the relevant mental representations in the subject's mind will have to refer to the conditions in question. But if the reference of these mental representations is determined in the same way, via a set of conditions, then an infinite regress is launched. 'Sooner or later', Pylyshyn says, 'the regress of specifying concepts in terms of other concepts has to bottom out' (Pylyshyn 2001 : 129). As Devitt puts it,

There must be some representations whose referential properties are not parasitic on those of others, else language as a whole is cut loose from the world. Description theories pass the referential buck, but the buck must stop somewhere. It stops with theories (...) that explain reference in terms of direct relations to reality (Devitt 2014: 477).

In addition to that general objection, there are a number of specific arguments against Frege's descriptivist approach. Let me mention three of them:

• The argument from perception

When we perceive an object and have a thought about it, the object the thought is about is the object the perception is about; and that, arguably, is *not* determined by properties the subject takes the referent to have (Pylyshyn 2007).⁴

• *The argument from indexicals*

Indexicals like 'I', 'here' and 'now' present their reference in a manner that is essentially perspectival and cannot be captured by means of descriptions, unless the descriptions themselves involve indexicals. For any indexical α and non-indexical

³ In Recanati (1993) modes of presentation are said to be 'truth-conditionally irrelevant'.

⁴ Often, we are unable to properly describe the object that is given to us in experience: we don't know what it is, yet that does not prevent us from referring to it directly (without conceptual mediation) and e.g. wondering what *it* can be (Dretske 1988: 73).

description 'the F', it is always possible for the subject to doubt, or to wonder, whether α is the F (Castañeda 1989, Perry 2000).

• Kripke's argument from ignorance and error

A linguistically competent subject may not possess the sort of identifying knowledge of the reference which that conception takes to be required to grasp the 'sense' of a proper name; instead, she may possess only 'unsteady and confused notions', as Locke puts it (Locke 1690 : IV, X, §4). Such notions are insufficient to determine the reference. Or, worse, the subject may be radically mistaken concerning the nature and properties of the reference. The possibility of such mistakes about the reference shows that the reference of a proper name cannot be what fits the subject's conception (otherwise the subject could not make mistakes).

The three arguments point in the same direction. On the descriptivist picture, reference is determined *satisfactionally*: the referent is what satisfies descriptions in the subject's mind. But in the three type of case we talked about (perceptual reference, indexical reference, and reference via names) what seems to be crucial are the subject's *relations* to the objects of thought: reference is determined relationally, not satisfactionally (Bach 1987: 12). Demonstrative thought rests on a perceptual/attentional link to the object of thought, while indexical reference rests on various contextual relations — the relation each individual bears to himself or herself in the case of first person thought, the relation to the place one occupies in the case of *here*-thoughts, and the relation to the present time in the case of *now*-thoughts. For proper names, what matters is the historical chain of communication through which the subject is related to the reference of the name. In all three cases, what fixes the reference is the relation, not the satisfaction of descriptions in the subject's mind.

5. *Mental files* — If the modes of presentation of objects involved in singular thoughts are not individual concepts, what are they? So far we know two things: (i) they have to satisfy Frege's constraint; (ii) they are 'nondescriptive' in the sense that their reference is determined relationally rather than satisfactionally. Mental files are a candidate that (arguably) fits that bill.

The mental file idea was first introduced in a descriptivist framework. Because the knowledge of the reference associated with a proper name typically involves a rich body of information rather than a single identifying description, a variant of the Fregean approach has emphasized the fact that the descriptions associated with proper names come in *clusters*. The 'cluster' idea is to be found in the work of Wittgenstein and Searle, but also in that of Strawson and Grice. A cluster of descriptions can be thought of as a *mental file* or *dossier* about an individual, involving many distinct pieces of information.

The mental file idea does not, by itself, entail descriptivism; it is entirely compatible with the relational stance characteristic of the anti-descriptivist movement. Instead of saying, with Searle and Grice, that the reference of a dossier is the item 'which satisfies the majority of, or each member of a specially favoured subset of, the descriptions in the dossier' (Grice 1969: 142), one can say the following. A mental file refers not to what satisfies the descriptions in the file (since the subject may be severely mistaken) but to what stands in the right relation to the file or, equivalently, to the subject who deploys the file. The relevant relation is a relation serving as *information channel*: a relation to the object which makes it possible for the subject to gain information from that object, and thus to feed the file based on that relation (Recanati 2012). For example, a demonstrative file is based on the attentional relation, a relation that makes it possible to gain perceptual information from the object one is attending to. The information thus gained goes into the file. (A demonstrative file, thus

understood, is a short-term file, which exists only as long as one is paying attention to the object. But long-term files too are based on relations to the reference, e.g. the 'familiarity relation' which holds whenever 'multiple exposure to [an] object has created and maintained in the subject a disposition to recognize that object' (Recanati 2012 : 71).)

Because they enable the subject to gain information from the object, the relations on which mental files are based, and which determine their reference, are epistemically rewarding (ER) relations. They are also called acquaintance relations because they put the subject in epistemic contact with the object, by making information about it available (information which it is the function of the file to store). Although very different from the attentional relation which underlies the deployment of demonstrative concepts, or the recognitional relation which underlies the deployment of recognitional concepts, the subject's relation to himself or herself, namely identity, counts as an ER relation, because it makes it possible for the subject to gain information about herself through a particular information channel, namely 'from inside' (through proprioception, introspection, episodic memory, etc.). It makes that possible in the following sense: one can get information about an individual in this manner (viz. from inside) only if one is that individual. The information thus gained goes into the subject's SELF-file, a special file based on the identity relation. Acknowledging the role of ER relations therefore provides a solution to the 'problem of the essential indexical' (Perry 2000): just like demonstrative concepts ('that thing'), indexical concepts such as the concept of oneself, the concept of the present time ('now') or the concept of the place one occupies ('here') should be construed not as descriptive concepts ('the x such that Fx') but as mental files based on particular ER relations. Only a subject in the right relation to the referent can think a thought involving such a concept. This captures the 'limited accessibility' feature supposedly characteristic of indexical thought.

An important aspect of the framework is that, in order to play their part, mental files need to stand in relation to the entities they refer to, via the ER relation which the subject deploying the file stands in to these entities. To be so related mental files have to be construed as entities on their own right, that is, as *particulars* — 'concrete mental particulars', as Crimmins and Perry (1989) say. Construing mental files as particulars in this way neatly solves the problem which ignorance of the reference raises for Fregean descriptivism. Kit Fine formulates the problem as follows:

Surely one may learn something different upon being told 'Cicero = Tully' and upon being told 'Cicero = Cicero'. (...) The main problem with the Fregean position is to say, in particular cases, what the difference in the meaning or sense of the names might plausibly be taken to be. Although there appear to be good theoretical reasons for thinking that there *must* be a difference, it seems hard to say in particular cases what it is. For as Kripke (1980) has pointed out, it seems possible for a speaker, or for speakers, to associate the same beliefs or information with two names, such as "Cicero" and "Tully." And if the information or beliefs are the same, then how can the sense be different? (Fine 2007 : 35)

A descriptivist might respond that the 'Cicero' file contains the metalinguistic piece of information 'called *Cicero*' while the Tully file contains 'called *Tully*'. This is enough of a difference in descriptive content between the two files. But, Pryor recently argued, there can be Frege cases even in the absence of any such metalinguistic difference (Pryor 2016; see Gray 2016 for discussion).⁵ Let us assume this is right, and ask Fine's question again: 'if the

⁵ This is actually controversial. Even if one accepts the idea of qualitatively identical but numerically distinct files, one can doubt that the existence of a pair of such files, as in Pagin's

information or beliefs are the same, then how can the sense be different?' Construing mental files as particulars provides an obvious answer. If there are two distinct files, then there are two distinct modes of presentation, even if the information in the two files is exactly the same ('a Roman orator').

5. Are modes of presentation aspects of content? — In the above citation from Fine I omitted one sentence. With the sentence restored (and italicized), the beginning of the passage reads as follows:

Surely one may learn something different upon being told 'Cicero = Tully' and upon being told 'Cicero = Cicero'. (...) *It is hard to see how to account for this possible cognitive difference except in terms of a semantic difference*. The main problem with the Fregean position is to say, in particular cases, what the difference in the meaning or sense of the names might plausibly be taken to be.

I answered Fine's question, 'if the information or beliefs are the same, then how can the sense be different?' by saying that mental files, which play the role of Frege's senses, are particulars. It follows that, if there are two numerically distinct files (possibly containing the same information), then there are two distinct senses. But, Fine might retort, are we still talking about *senses*? Is the (purely numerical) difference between the two files construed as particulars a *semantic* difference? Clearly not. The difference is 'syntactic': it is a difference between the mental representations that are respectively deployed, rather than a difference in the content of the representations. The representations have the same content – they refer to the same individual and carry the same information about it – but they are distinct representations. Arguably, a purely syntactic difference such as this is sufficient to generate Frege cases, so it was a mistake on Frege's part to argue from the possibility of Frege cases to the necessity of adding an extra layer of content, that of 'sense', on top of the reference of expressions.

On that type of approach, defended by Jerry Fodor (1998) and Sainsbury and Tye (2012), what plays the role of mode of presentation is *the mental representation itself*, qua syntactic entity. The subject who believes that Cicero was Roman but that Tully was not entertains conflicting attitudes towards the same truth-conditional content because that content is apprehended via *distinct mental representations* (involving two distinct mental files: a 'Cicero' file and a 'Tully' file). So, to account for Frege cases, we need only two things (the representation and its reference) rather than three (the representation, its sense, and its reference).

Is the same move available for linguistic expressions? Can we say that we need only two things: the reference of the expression (its semantic content), and *the expression itself* serving as mode of presentation and accounting for Frege cases? This is what *Mates' cases* may seem to suggest: there being two different *words* (eg 'psychiatrist'/'alienist', or 'Greek'/'Hellene') is sufficient to make Frege cases possible (Mates 1950). Note, however,

^{&#}x27;moth' example (Pagin 2013: 140), could give rise to Frege cases. Indeed, as long as the files are indistinguishable, it is far from clear that the subject can deploy one (rather than the other) in a distinctive way to think - for example - of one of the alleged moths (rather than the other). In the absence of any distinctive element in the content of the files, it seems that the existence of two separate files only allows the subject to represent the cardinality of the set of moths he takes himself to perceive, that is, the fact that there are two, but not to relate distinctively to one of the alleged moths in thought. If this is true, then one cannot have a Frege case involving two numerically distinct but indistinguishable files.

that the existence of distinct words is not *necessary* to generate Frege cases. Even if there is a single word in the language, e.g. 'Paderewski' as the proper name of the Polish citizen who was well-known both as a politician and as a pianist, Frege cases will still be possible if the subject associates *distinct mental files* with that name (thinking there are two distinct Paderewskis, Paderewski the musician and Paderewski the politician).⁶ This shows that it is the associated mental representation, not the linguistic expression itself, which matters. Indeed, the existence of distinct words is not even sufficient to generate Frege cases, contrary to what Mates' cases superficially suggest: the subject may treat 'Cicero' and 'Tully' as two names of the same individual, and *associate both of them with the same mental file for Cicero/Tully*. No Frege case can be generated in these circumstances.⁷

What I have just said suggests that, for linguistic expressions, we do need three things rather than two. But the three things are not, as for Frege, the expression, its sense, and its reference. The three things now are: the linguistic expression, the associated mental representation, and the reference of the mental representation, which the linguistic representation inherits. On this view, what plays the role of mode of presentation for a linguistic expression is neither a sense construed as an aspect of its semantic content, nor the linguistic expression itself, but the associated mental representation. Thus a singular term such as the name 'Cicero' has a reference (Cicero), which it inherits from the mental file it is associated with (the 'Cicero' file). The file itself refers to Cicero in virtue of informational connections to Cicero. Mental files thus construed are 'singular terms in the language of thought' (Recanati 2012). They are syntactic entities.

Still, the idea of an additional level or aspect of *content*, namely cognitive content, does not have to be given up. For mental files themselves are typed by the sort of ER relation they exploit: different types of file — e.g. SELF-files, demonstrative files, recognitional files, deferential files, or what have you —exploit different types of contextual relation to the reference. On this view (i) the type of a file corresponds to its function or role: exploiting a given ER relation, and (ii) tokening a file of a given type presupposes that the subject deploying the file is standing in the right relation to the reference. That presupposition corresponds to a layer of content that comes in addition to the truth-conditional content of the thought in which the file is deployed. It is that layer of content — cognitive content as opposed to truth-conditional content — that accounts for the subject's behaviour, and in terms of which the subject's rationality is to be assessed. For example, if the subject hallucinates a desirable object in front of her, the demonstrative file she deploys about 'it' is empty⁸ and fails to contribute to truth-conditional content (so the thought she entertains about the hallucinated object is neither true nor false) but the subject's attempt at grasping the object can be rationally accounted for in terms of the subject's presupposition that she is standing in

The mental file associated with the proper name 'John' in the first sentence is redeployed in association with the anaphoric description 'the bastard' in the subsequent sentence. As a result no Frege case is possible: a rational and linguistic competent subject cannot ascribe contradictory properties to John and to 'the bastard', since, simply in virtue of *understanding* the discourse, she knows they are one and the same individual.

⁶ The 'Paderewski' example is discussed in Kripke 1979.

⁷ Consider the following example, involving anaphora (from Recanati 2016):

^{&#}x27;I saw John, the other day. The bastard, did not greet me.'

⁸ The file is empty in the sense that it does not refer to anything (since there is no object at the other end of the ER relation); but, of course, it may still contain putative information about the object the subject takes herself to be perceiving.

front of a desirable object and gaining information from it in perception. Likewise, the subject's *saying* 'That is desirable' can be rationally accounted for in terms of the content of the subject's presupposition, even if the utterance itself fails to express a singular proposition (because the referring expression is empty).

Cognitive content is what is shared by two persons who both think e.g. 'My pants are on fire' (Kaplan 1989: 533). The truth-conditional contents of their respective thoughts are different (since A thinks that A's pants are on fire, while B thinks that B's pants are on fire), but they both deploy a SELF-file, and the sort of behaviour their thought causes is appropriate to the situation of someone whose pants are on fire. So, despite the difference in truth-conditional content, the cognitive content is the same.

Frege would of course deny that two thoughts can be the same while carrying different truth-conditions. For him, thoughts simultaneously obey the two criteria of difference mentioned in section 2: the truth-conditional criterion TC and the cognitive criterion CC. But this is a terminological matter. Cognitive contents as I have defined them are individuated in purely cognitive terms and abstract from truth-conditional content. They are thoughts in the *narrow* sense (thoughts_N), in contrast to Fregean thoughts, which are thoughts in the *broad* sense (thoughts_B). Two subjects both thinking 'My pants are on fire' entertain the same thought_N, despite the difference in truth-conditional content. This is of course compatible with Frege's claim that these subjects entertain different thoughts_B, in virtue of the first criterion of difference (the truth-conditional criterion).⁹

Be that as it may, Frege cases work in the opposite direction. The subject who looks at himself in the mirror and, not recognizing himself, thinks 'His pants are on fire', entertains a thought whose truth-conditional content is the same as that of the thought 'My pants are on fire', if he were to entertain it; but the subject in that situation dissents from the latter (he does *not* accept 'My pants are on fire') while he assents to the former. So the cognitive content of the two thoughts, i.e. that which accounts for the subject's behaviour (including his assent/dissent behaviour), is different. In that situation the subject could say or think, without irrationality: 'His pants are on fire, but mine aren't'. The thoughts are different, whether understood narrowly or broadly.

References

Bach, K. (1987) Thought and Reference. Oxford: Clarendon Press.

Castañeda, H.-N. (1999) *The Phenomeno-Logic of the I : Essays on Self-Consciousness* (edited by J. Hart and T. Kapitan). Bloomington : Indiana University Press.

Crimmins, M. and Perry, J. (1989) The Prince and the Phone Booth. *Journal of Philosophy* 86: 685-711. Reprinted in Perry (1993), 249-78.

Devitt, M. (2014) Lest Auld Acquaintance Be Forgot. Mind & Language 29: 475-484.

⁹ Likewise, when I said that, if the subject hallucinates an object in front of her, the demonstrative thought she entertains about the hallucinated object is neither true nor false, I used 'thought' in the narrow sense. A neo-Fregean like Evans or McDowell, unwilling to individuate thoughts narrowly, would rather say that there is no singular thought_B, in this type of case, but only an illusion of singular thought_B (Evans 1982, McDowell 2011, part II). (For there to be a singular thought_B, there *has to be an object* such that the thought is true iff *that object* satisfies certain conditions.)

Donnellan, K. (1966) Reference and Definite Descriptions. *Philosophical Review* 75: 281-304.

Donnellan, K. (2012) *Essays on Reference, Language, and Mind* (edited by J. Almog and P. Leonardi). Oxford: Oxford University Press.

Dretske, F. (1988) Explaining Behavior. Cambridge, Mass. : MIT Press.

Evans, G. (1982) *The Varieties of Reference* (edited by J. McDowell). Oxford: Clarendon Press.

Evans, G. (1985) Collected Papers. Oxford: Clarendon Press.

Fine, K. (2007) Semantic Relationism. Oxford: Blackwell.

Fodor, J. (1994) The Elm and the Expert. Cambridge, Mass.: MIT Press/Bradford Books.

Fodor, J. (1998) Concepts. Where Cognitive Science Went Wrong. Oxford: Clarendon Press.

Frege, G. (1967) Kleine Schriften, ed. I. Angelelli. Hildesheim: Olms.

Gray, A. (2016) Minimal Descriptivism. Review of Philosophy and Psychology 7: 343-64.

Grice, P. (1969) Vacuous Names. In D. Davidson & J. Hintikka (eds.) *Words and Objections*, pp.118-45. Dordrecht: Reidel.

Kaplan, D. (1978) DTHAT. Syntax and Semantics 9: 221-43.

Kaplan, D. (1989) Demonstratives. In J. Almog et al. (eds.) Themes from Kaplan, 481-563.

New York: Oxford University Press.

Kripke, S. (1979) A Puzzle About Belief. In A. Margalit (ed.) Meaning and Use, pp. 239-83.

Dordrecht: Reidel.

Kripke, S. (1980) Naming and Necessity. Oxford: Blackwell.

Locke, J. (1690) An Essay Concerning Humane Understanding. London: Thomas Basset.

McDowell, J. (2011) *Meaning, Knowledge and Reality*. Cambridge, MA: Harvard University Press.

McGinn, C. (1982) The Structure of Content. In A. Woodfield (ed.) *Thought and Object*, 207-58. Oxford: Clarendon Press.

Mates, B. (1950) Synonymity. *University of California Publications in Philosophy* 25: 201-26.

Pagin, P. (2013) The Cognitive Significance of Mental Files. *Disputatio* 5/36: 133-45.

Peacocke, C. (1975) Proper Names, Reference, and Rigid Designation. In Blackburn, S. (ed.)

Meaning, Reference and Necessity, 109-32. Cambridge: Cambridge University Press;

Perry, J. (2000) The Problem of the Essential Indexical and Other Essays, expanded edition.

Stanford: CSLI.

Pryor, J. (2016) Mental Graphs. Review of Philosophy and Psychology 7: 309-41.

Pylyshyn, Z. (2001) Visual Indexes, Preconceptual Objects, and Situated Vision. *Cognition* 80: 127-158.

Pylyshyn, Z. (2007) Things and Places: How the Mind Connects to the World. Cambridge,

Mass.: MIT Press/Bradford Books.

Recanati, F. (1993) Direct Reference: from Language to Thought. Oxford: Blackwell.

Recanati, F. (2012) Mental Files. Oxford: Oxford University Press.

Recanati (2016) Mental Files in Flux. Oxford: Oxford University Press.

Russell, B. (1903) The Principles of Mathematics. Cambridge: Cambridge University Press.

Sainsbury, M. and Tye, M. (2012) *Seven Puzzles of Thought*. Oxford: Oxford University Press.

Schiffer, S. (1978) The Basis of Reference. Erkenntnis 13: 171-206.

Searle, J. (1958) Proper Names. Mind 67: 166-73.

Strawson P. (1974) Subject and Predicate in Logic and Grammar. London: Methuen.

Wittgenstein (1953) Philosophical Investigations, trans. E. Anscombe. Oxford: Blackwell.

Suggested further readings

(Only recent works are listed. For a more comprehensive bibliography see the 'Singular Thought' entry by M. Murez, F. Recanati and F. Carvalho in *Oxford Bibliographies Online*, 2014.)

Dickie, I. (2015) Fixing Reference. Oxford: Oxford University Press.

Goodman, R., Genone, J. and Kroll, N. (eds.) (2020) *Singular Thought and Mental Files*. Oxford: Oxford University Press.

Hawthorne, J. and Manley, D. (2012) *The Reference Book*. Oxford: Oxford University Press.

Jeshion, R. (ed.) (2010) New Essays on Singular Thought. Oxford: Oxford University Press.

Millikan, R. (2018) *Beyond Concepts: Unicepts, Language and Natural Information*. Oxford: Oxford University Press.

Murez, M. and Recanati, F. (eds.) (2016) *Mental Files*. Special issue, *The Review of Philosophy and Psychology*, 7:2.

Perry, J. (2012) Reference and Reflexivity, 2nd ed. Stanford: CSLI Publications.

Raftopoulos, A. and Machamer, P. (eds.) (2012) *Perception, Realism, and the Problem of Reference*. Cambridge: Cambridge University Press.